

Specification for

Safety of household and similar electrical appliances —

Part 202: Particular requirements —

Section 202.4 Spin extractors

This European Standard EN 60335-2-4 has the status of a
British Standard

UDC 621.365:64-621-83:64:614.8.004.1-777:621.396.669.8

Cooperating organizations

The European Committee for Electrotechnical Standardization (CENELEC), under whose supervision this European Standard was prepared, comprises the National Committees of the following countries.

Austria	Italy
Belgium	Luxemburg
Denmark	Netherlands
Finland	Norway
France	Portugal
Germany	Spain
Greece	Sweden
Iceland	Switzerland
Ireland	United Kingdom

This British Standard was published under the authority of the Board of BSI and comes into effect on 28 September 1990

© BSI 11-1999

The following BSI references relate to the work on this standard:
Committee reference LEL/161
Draft for comment 88/24197 DC

ISBN 0 580 18574 5

Amendments issued since publication

Amd. No.	Date of issue	Comments
6904	April 1992	
7279	October 1992	
8573	May 1995	Indicated by a sideline in the margin

Contents

	Page
Cooperating organizations	Inside front cover
National foreword	iii
Brief history	2
Foreword	2
1 Scope	5
2 Definitions	5
3 General requirement	5
4 General notes on tests	5
5 Rating	5
6 Classification	5
7 Marking	5
8 Protection against electric shock	6
9 Starting of motor-operated appliances	6
10 Input and current	6
11 Heating	6
12 Operation under overload conditions of appliances with heating elements	7
13 Electrical insulation and leakage current at operating temperature	7
14 Radio and television interference suppression	7
15 Moisture resistance	7
16 Insulation resistance and electric strength	7
17 Overload protection	7
18 Endurance	7
19 Abnormal operation	8
20 Stability and mechanical hazards	8
21 Mechanical strength	10
22 Construction	10
23 Internal wiring	10
24 Components	10
25 Supply connection and external flexible cables and cords	10
26 Terminals for external conductors	11
27 Provision for earthing	11
28 Screws and connections	11
29 Creepage distances, clearances and distances through insulation	11
30 Resistance to heat, fire and tracking	11
31 Resistance to rusting	11
32 Radiation, toxicity and similar hazards	11
Appendix A Thermal controls and overload releases	12
Appendix B Electronic circuits	12
Appendix C Construction of safety isolating transformers	12
Appendix D Alternative requirements for protected motor units	12
Appendix E Measurement of creepage distances and clearances	12
Appendix F Motors not isolated from the supply mains and having basic insulation not designed for the rated voltage of the appliance	12
Appendix G Circuit for measuring leakage currents	12

	Page
Annex ZA (normative) Switches	13
Annex ZX (normative) Special national conditions	13
Annex ZY (informative) National deviations	13
National appendix W	Inside back cover

National foreword

This Section of BS 3456-202, has been prepared under the direction of the Light Electrical Engineering Standards Policy Committee and is the English language version of EN 60335-2-4, “*Safety of household and similar electrical appliances: Part 2: Particular requirements for spin extractors*”, including amendment A51 and amendment A2, published by the European Committee for Electrotechnical Standardization (CENELEC). It was derived from the third edition (1984) of IEC Publication 335-2-4 including its Amendments No. 1 and No. 2. For the sake of clarity, the CENELEC common modifications have been incorporated at the appropriate places in the text of IEC 335-2-4:1984, they are marked by a vertical line at the left-hand margin. The relevant parts of the original IEC text have been quoted as “INFORMATION” directly after the text of the common modifications.

Appendices designed “normative” are part of the body of the standard.

Appendices designated “informative” are given only for information.

This British Standard is to be read in conjunction with BS 3456-201:1990 *General requirements*, including only those amendments shown in the following table that are marked with an asterisk, which supplement and modify BS 3456-201, which is the English language version of EN 60335-1. EN 60335-1 was derived from the 1983 reprint of IEC Publication 335-1 (1976) second edition including Amendments 1, 2 and 3 to IEC 335-1.

Amendment to BS 3456-201:1990	Amendment to EN 60335-1:1988	Amendment to IEC 335-1:1976
Amendment No. 1:1990*	Amendment 2:1988	Amendment No. 4:1984
Amendment No. 2:1990*	Amendment 5:1989	Amendment No. 5:1986
Amendment No. 3:1990*	Amendment 6:1989	Amendment No. 6:1988
Amendment No. 4:1992*	Amendment A51:1991	—
Amendment No. 5:1992	Amendment A52:1992	—
Amendment No. 6:1992	Amendment A53:1992	—
Amendment No. 7:1993	Amendment A54:1992	—
Amendment No. 8:1993	Amendment A55:1993	—
Amendment No. 9:1993*	Corrigendum to A55:1993	—
Amendment No. 10:1994*	Corrigendum to EN 60335-1:1988	—

This Section supersedes BS 3456-102.4:1987, which will be withdrawn on 1 July 1991 in accordance with the CENELEC Internal Regulations.

Product approval. Attention is drawn to the fact that products conforming to this British Standard may be approved by the British Electrotechnical Approvals Board for the purposes of participation in the CENELEC Certification Agreement and in the CB Scheme of the IECEE. (Details of the BEAB Approval Marks Scheme are given on the inside of the back cover).

The foreword of the EN makes reference to “date of withdrawal (dow) of conflicting national standards” as “1994-09-01”. In this case the relevant national standard is BS 3456-202.4 but the dow relates only to those parts of the British Standard subject to Amendment No. 2. Certificates and marks will not be awarded after this date with respect to the British Standard not incorporating Amendment No. 2. They will be awarded with respect only to the amended British Standard. However, such certificates and marks already awarded with respect to the British Standard not incorporating Amendment No. 2 may continue to apply for production until 1999-09-01.

The foreword of the EN, as amended by amendment A51:1991, makes reference to “date of withdrawal of conflicting national standards” as “1993-07-01”. This now relates only to those parts of BS 3456-202.4 subject to Amendment No. 1. Certificates and marks will not be awarded after this date with respect to the British Standard not incorporating Amendment No. 1. They will be awarded with respect only to the amended British Standard. However, such certificates and marks already awarded with respect to the British Standard not incorporating Amendment No. 1 may continue to apply for production until 1998-07-01.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, the EN title page, pages 2 to 14, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

UDC: 621.365:64-621-83:64:614.8.004.1-777:621.396.669.8

Key words: Household electrical appliance; spin extractor; protection against electric shock; protection against fire risk; protection against mechanical hazard

English version

Safety of Household and similar electrical appliances Part 2: Particular requirements for spin extractors

(includes amendments A51:1991 + A2:1992)
(IEC 335-2-4 (1984) 3rd edition, modified)

Sécurité des appareils électrodomestiques et
analogues
Deuxième partie: Règles particulières pour les
essoreuses centrifuges
(inclut les amendements A51:1991 + A2:1992)
(CEI 335-2-4 (1984) 3ème édition, modifiée)

Sicherheit elektrischer Geräte für den
Hausgebrauch und ähnliche Zwecke
Teil 2: Besondere Anforderungen für
Wäscheschleudern
(enthält Änderungen A51:1991 + A2:1992)
(IEC 335-2-4 (1984) 3. Ausgabe, modifiziert)

This European Standard was ratified by CENELEC on 13 September 1988.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CENELEC Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B-1050 Brussels

© CENELEC 1989 Copyright reserved to all CENELEC members.

Ref. No. EN 60335-2-4:1989 + A51:1991 + A2:1992 E
 **Documents**
Document Sharing Hub